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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/066,056	01/31/2002	Koji Hayashi	10449-043001	3950
26161	7590	04/29/2005	EXAMINER	
FISH & RICHARDSON PC			PSITOS, ARISTOTELIS M	
225 FRANKLIN ST			ART UNIT	
BOSTON, MA 02110			PAPER NUMBER	
			2653	

DATE MAILED: 04/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/066,056

Applicant(s)

HAYASHI ET AL.

Examiner

Aristotelis M Psitos

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>12/17/04 &amp; 3/14/05</u> | 6) <input type="checkbox"/> Other: _____  |

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### DETAILED ACTION

Applicants' response of 2/28/05 has been considered with the following results.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

1. Claims 1,4-9 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 0974966 further considered with Nishikawa et al.

With respect to apparatus independent claim 9, the EP document discloses in this environment, a buffer-underrun condition, which the examiner interprets as meeting the counter of claim 9, and the system control element 15, which is interpreted to meet the control unit limitation.

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With respect to method claims 1 and 18, such is met when the above system operates.

With respect to method claims 4-8:

the restarting commences as claimed (claim 4); element 11 meets the limitation of claim 5; a buffer memory is inherently provided (claim 6); efm is inherently provided by the encoder (claim 7); and the restart is at the head of the frame (claim 8).

There is no clear depiction that there is any sub-code data.

Nevertheless, as is taught in this environment, the sub-code data (as it maps to applicants' sub-code data) is known – see Nishikawa et al col. 2 lines 23-30. Hence to control the overall operation of the system, by recognition of a count value (frame) and the sub-code data (p,q,r, ...) would have been obvious to one of ordinary skill in the art so as to further locate the appropriate location where a restart must occur.

#### ***Response to Arguments***

Applicant's arguments with respect to the above claims have been considered but are moot in view of the new ground(s) of rejection.

2. Claims 1,4-9 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Hayashi patent ('616 or '213) further considered with Nishikawa et al.

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

With respect to the apparatus claim, either of the Hayashi patent provide for an interrupt control capability and restart at the appropriate location. The counter is interpreted as being either element 45 or 46 whereas the control unit is at least element 43 in unit 22.

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The method claims are met when the above apparatus operates.

With respect to claims 4-8:

The restarting commences as claimed (claim 4); encoding is provided by element 14 (claim 5); buffer memory is element 13 (claim 6); efm is provided by the encoding ability (claim 7); and restart is at the head of the frame (claim 8).

There is no clear depiction that there is any sub-code data.

Nevertheless, as is taught in this environment, the sub-code data (as it maps to applicants' sub-code data) is known – see Nishikawa et al col. 2 lines 23-30. Hence to control the overall operation of the system, by recognition of a count value (frame) and the sub-code data (p,q,r, ...) would have been obvious to one of ordinary skill in the art so as to further locate the appropriate location where a restart must occur.

#### ***Response to Arguments***

Applicant's arguments with respect to the above claims have been considered but are moot in view of the new ground(s) of rejection.

3. Claims 2,3,10-17,19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claims 1,4-9, and 18 as stated in paragraphs 2 & 3 above, and further in view of Lin.

With respect to the dual counting recited in dependent claims 2,3,10,19 and 20:

Although there is appropriate signal processing to restart at the appropriate location, because of the above rejections with respect to dependent claims 2,3,10,14,19 and 20 the examiner is uncertain if the primary references do indeed have the first counter.

Nevertheless, Lin discloses in this environment a first and second counter that performs the requisite counting as recited – see the description of the counting ability by elements 220, 210 and 240.

It would have been obvious to modify the base system of any of the above primary references with the additional dual stage counting ability, motivation is as discussed in Lin, to ensure proper restart position.

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With respect to dependent claims 11 and 15 – encoding is provided as discussed above with respect to the primary references, and hence no further motivation is required.

With respect to dependent claims 13 and 17, the encoder provides efm, and no further motivation is required.

With respect to claims 12 and 16, such is met by the two counters in Lin and motivation has been given.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Tsukihashi ('053) – see the description with respect to col. 6 lines 32-42 which also discloses the ability of location a restart position predicated upon both the frame and sub-code information

Yamamoto – see the description of his operation with respect to the sub-code detection in order to properly offset to the correct position – col. 6 lines 29 –49.

Tsukihashi (('211), col 6 lines 23 plus with respect to the sub-code ability.

3. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aristotelis M Psitos whose telephone number is (571) 272-7594. The examiner can normally be reached on M-Thursday 8 - 4.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William R. Korzuch can be reached on (571) 272-7589. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Aristotelis M Psitos  
Primary Examiner  
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A handwritten signature in black ink, appearing to be 'AM' with a large, stylized flourish extending from the bottom.

AMP